

DECREASE FATALITIES IN THE CONSTRUCTION INDUSTRY

Goal 3.1F¹: Decrease fatalities in the construction industry by 3 percent by focusing on the four leading causes of fatalities (falls, struck-by, crushed-by, electrocutions and electrical injuries).

Construction Fatality Rate 3-Year Average	
Baseline: CY 93-95	14.5 /100,000
CY 96-98	14.2 /100,000
CY 97-99	14.2 /100,000
Percent Change	- 2 %
<i>CY 2000 data available 8/2001</i>	

Results: This goal was not met. Using a 3 year average, the CY 1997-1999 fatality rate declined 2 percent from the baseline.

Program Description: This DOL Occupational Safety and Health Administration (OSHA) program, consisting of inspections, compliance assistance and training, concentrates on the construction sector because this industry has the most fatalities of any covered sector.

Analysis of Results: Fatality rates declined from the baseline; however, the reduction was less than the 3 percent target. This may be the result of unforeseen changes in the construction workforce, industry, and economy. Due to the economic expansion, the construction workforce was substantially larger in CY1997-99 than in the baseline years (CY1993-95). The resulting effects of a comparatively less-experienced workforce and an increased pace and amount of work may have played a role in the industry's fatality rate.

DOL is evaluating methods for improving OSHA's compliance strategies, partnerships, and outreach programs. The objective of these approaches is to reach less-experienced workers and address problems in the riskier trades and industries. These efforts, which are described below, should help reduce the construction fatality rate even further.

Strategies: During FY 1999, DOL conducted 18,634 construction inspections and 1,774 complaint investigations. For both outreach and enforcement, DOL targeted the specific construction worksites where the most fatalities occurred, including worksites in highway construction, roofing, steel erection, and electrical and mechanical trades.

In FY 1999, numerous cooperative efforts with the construction industry were in place, including training programs and cooperative programs, agreements, and local partnerships benefitting over 2000 employers and over 10,000 employees. These included a roofing industry partnership for safety and health, a scaffold industry association interactive training program, the United Brotherhood of Carpenter's Scaffold Training and Awareness Program, and many others.

Electricians finalizing installation of one of several back-up generators at a high-tech switching station. Accidental contact with energized parts are one of the leading causes of fatalities in construction industry. Courtesy of the Centex Construction Company.

Photo by: Michael Carpenter



¹ FY 1999 goal reported due to data availability. FY 2000 data will be available in August of 2001.

DOL's "Interim Fall Protection Compliance Guidelines for Residential Construction" were rewritten and issued in the "Plain Language" format. The guidelines address work on residential low and steep roofs, installation of roof trusses and sheathing, and other work on roofs, such as installation of electrical

devices, wiring, and safety alarms.

In FY 2000, DOL awarded institutional competency building grants to assist nonprofit organizations in developing or expanding their safety and health capacity.

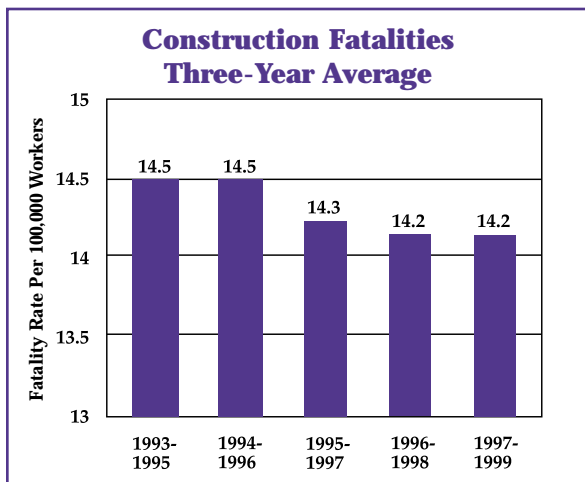
Preference was given to organizations that proposed to serve immigrants, contingent, and other vulnerable workers, as well as small business employers and employees. Three of the selected organizations are targeting their programs in the construction industry and received over \$500,000 in grants. These training grants are in addition to \$1.75 million in grants to construction organizations. These grants provided funding to develop and conduct safety and health training programs and included awards to organizations targeting safety and health hazards in construction. The targeted safety and health hazards included the four leading causes of fatalities (falls, struck-by, crushed-by, electrocutions and electrical injuries). More than \$500,000 was awarded for fall protection programs.

In FY 2000, DOL implemented a partnership template which is to be

used nationwide to develop partnerships with local chapters of the Associated Builders and Contractors (ABC). Eighteen DOL field offices entered into partnerships with local chapters of the ABC. There are now partnerships in 11 States and 7 of the 10 DOL Regions. As one of their goals, ABC partners aim for a three percent annual reduction in injuries, illnesses, and fatalities.

Another partnership between OSHA and the Houston Chapter of the Associated General Contractors (AGC) recognizes excellence in safety and health, strives to raise workplace safety awareness among subcontractors, and works to reduce injuries, illnesses and fatalities. The partnership's success has spawned a new effort by OSHA and AGC to work together to bring training to Spanish-speaking contractors in the Houston area.

DOL continued to work on several safety and health regulations covering construction in various stages of rule-making: confined spaces; safety and health programs; fall protection; scaffolds; and silica. In FY 2001, DOL



A welder fabricates a support bracket for a precast wall.

Photo by: Michael Carpenter



issued a revised regulation for the steel erection industry, which is expected to prevent 30 deaths per year. The steel erection industry is one of the most hazardous in construction in terms of fatality rates. In FY 2001, DOL will begin to develop a data initiative for the construction industry, which will allow the agency to improve the inspection targeting system, outreach, and regulatory efforts. DOL will also analyze information on the major causes of fatalities in order to refine its program mix. Other plans include evaluating the impact of the current fall protection policy for residential housing and developing compliance strategies, including outreach efforts, to encourage more attention to fall protection systems and proper scaffold

erection. In addition, DOL is creating a database for construction fatalities to better determine building types, construction phases, and construction activities where fatalities are most likely to occur. DOL then will determine specific targeted counter-measures to assist the industry.

Goal Assessment: In FY 2001, the target is an 11 percent reduction which appears ambitious in view of the CY 1999 fatality data for this performance measure. However, many OSHA program initiatives in construction began after CY 1999, the most recent year for which BLS data are available. The Department's efforts to reach out to the construction industry are expected to show some effects in the fatality data for FY 2000. ■



Iron workers utilize a double lanyard fall protection system that allows them to move about the work surface without ever being disconnected from a suitable anchorage point. Courtesy of the Centex Construction Company.

Photo by: Michael Carpenter